

Claims

1. A touch-entry user input device having a first mode in which the device does not perform a first function and a second mode in which the device does perform the first function wherein the device has means for user input and is arranged, when in the first mode, to initiate exit from the first mode and entry into the second mode at the initiation of a user input.
2. A touch-entry user input device as claimed in claim 1 comprising detection means for detecting the initiation of a user input and control means for initiating the exit from the first mode.
3. A touch-entry user input device as claimed in claim 1 or 2 wherein the first mode is an energy conservation mode.
4. A touch-entry user input device as claimed in claim 1, 2 or 3 wherein the second mode is a low power radio communication mode.
5. A touch-entry user input device as claimed in any preceding claim wherein the means for user input comprises a user depressible key.
6. A touch-entry user input device as claimed in claim 5 comprising discrimination means for discriminating an instantaneous depression of the key from a continuous depression of the key.
7. A touch-entry user input device as claimed in any preceding claim wherein the initiation of the exit from the first mode occurs before discrimination of the user input.
8. A touch-entry user input device as claimed in any preceding claim wherein the entry into the second mode occurs before discrimination of the user input.
9. A touch-entry user input device as claimed in any preceding claim

further comprising low power radio transceiver means and wherein the exit from the first mode is initiated by sending a message using the low power radio transceiver means.

10. A touch-entry user input device as claimed in any preceding claim further comprising low power radio transceiver means wherein the first function comprises transmitting data using the low power radio transceiver means.
11. A touch-entry user input device as claimed in any preceding claim operating as a Slave in a Bluetooth piconet.
12. A touch-entry user input device as claimed in any preceding claim operating in accordance with the Bluetooth Standard wherein the first mode is the Sniff Mode or Park Mode
13. A touch-entry user input device as claimed in claim 12 wherein the exit from the Sniff Mode is initiated by transmitting a LMP_unsniff_req message.
14. A touch-entry user input device as claimed in claim 12 or 13 wherein the exit from the Park Mode is initiated by transmitting a LMP_accepted message.
15. A touch-entry user input device as claimed in any preceding claim operating in accordance with the Bluetooth Standard wherein the second mode is the Active Mode.
16. A touch-entry user input device as claimed in any preceding claim wherein the time taken to exit from the first mode and enter into the second mode is less than the time taken to discriminate a user input.
17. A touch entry user input device substantially as hereinbefore described with reference to and/or as shown in the drawings.
18. A method of transferring a user input device, in response to user input,

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function where there is an inherent delay in the transfer process, comprising the steps of:

detecting the initiation of user input and then immediately initiating the transfer.

19. A method as claimed in claim 18, wherein user input is performed by depressing a user depressible key.

20. A method as claimed in claim 19, further comprising the step of discriminating an instantaneous depression of the key from a continuous depression of the key.

21. A method of changing operational modes of a touch entry user input device substantially as hereinbefore described with reference to and/or as shown in the drawings.